PROTECTED PLANT PRESERVATION PLAN

CITY OF VICTORVILLE, CALIFORNIA

APN: 3093-141-02

Prepared for:

United Engineering Group 8885 Haven Avenue, Suite 195 Rancho Cucamonga, CA 91730

Prepared by:

RCA Associates, Inc. 15555 Main Street, #D4-235 Hesperia, CA 92345 (760) 956-9212

> Biologists: Ryan Hunter Brian Bunyi Jessica Hensley



Project: #2021-246 JT

December 17, 2021

TITLE PAGE

Date Report Prepared: December 17, 2021

Field Work Completed: December 16, 2021

Report Title: Protected Plant Preservation Plan

Project Location: Victorville, California

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8885 Haven Avenue, Suite 195 Rancho Cucamonga, CA 91730

Principal Investigators: Ryan Hunter, Environmental Scientist & Biologist

Brian Bunyi, Environmental Scientist & Biologist Jessica Hensley, Environmental Scientist/Biologist

Randall Arnold, Senior Biologist

Contact Information: Randall C. Arnold, Jr.

RCA Associates, Inc.

15555 Main Street, #D4-235

Hesperia, CA 92345

(760) 956-9212

rarnold@rcaassociatesllc.com www.rcaassociatesllc.com

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1.0 SUMMARY

At the request of the project proponent, RCA Associates, Inc. surveyed an approximate 13-acre property located on the northeast corner of the intersection of Cottonwood Avenue and Pahute Avenue in the City of Victorville, California (APN: 3093-141-02) (Figures 1 and 2). The property site is located in Section 31, Township 5 North, Range 4 West (USGS Hesperia, CA 7.5-minute quadrangle).

The purpose of the survey was to evaluate the Joshua trees present on site and to determine which trees were suitable for relocation and which trees could be discarded prior to site clearing activities. This report provides the results of the Joshua tree survey performed on December 16, 2021. Following completion of the survey, RCA Associates, Inc. prepared this Protected Plant Preservation Plan to assist the project proponent with future relocation of any Joshua trees. Information on the Joshua trees which will need to be relocated-transplanted in the future is provided in Section 4.0. The City of Victorville Municipal Code (Chapter 13.33) and County of San Bernardino Municipal Code (88.01.060) stating the purpose of the Protected Plant Plan, the importance of preserving the Joshua Tree as an important native desert vegetation, and the consequences of removing a tree without authorization. The requirements of the City and County Ordinances (Chapter 13.33) and (Chapter 88.01.060 are provided in Appendix B.

Based on the results of the field investigations there are 4 Joshua trees which occur within the boundaries of the property (Figures 1, 2 and 3). Based on the evaluation and analysis of each tree it was determined that 0 of the 4 Joshua trees (0%) are suitable for transplanting. These trees are marked in red in Table 4-1. The remaining 4 Joshua trees (100%) were determined to be unsuitable for transplanting due to a variety of factors such as size, condition, damage, dying, excessive leaning, possibly disease, clonal, etc.

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2.0 INTRODUCTION AND PROJECT LOCATION

The area surveyed is located on the northeast corner of the intersection of Cottonwood Avenue and Pahute Avenue in the City of Victorville. Vacant land borders the properties boundaries on the north, south and east sides, with lots zoned for commercial in the west. The biological resources on the site consist of a desert scrub community typical of the area which include Joshua tree (*Yucca brevifolia*), rubber rabbitbrush (*Ericameria nauseosa*), white bursage (*Ambrosia dumosa*), California buckwheat (*Eriogonum fasciculatum*), and red brome (*Bromus rubens*).

Joshua trees occur throughout the Mojave Desert in Southern California and are typically found at an elevation of 400 to 1,800 meters (~1,200 to ~5,400 feet). Joshua trees within the western portion of the Mojave Desert typically receive more annual precipitation during "normal" years; consequently, cloning occurs more often resulting in numerous trunks sprouting from the same root system (Rowland, 1978). Joshua tree habitats provide habitat for a variety of wildlife species including desert woodrats (*Neotoma* sp.) and night lizards (*Xantusia* sp.) both of which utilize the base of the trees. A variety of birds also utilize Joshua trees for nesting such as hawks, common ravens, and cactus wrens. CDFW consider Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. Joshua trees are also considered a significant resource under the California Environmental Quality Act (CEQA) and are included in the Desert Plant Protection Act, Food and Agricultural Code (80001 – 80006).

3.0 METHODOLOGIES

Pedestrian surveys were walked throughout the site and biologists from RCA Associates, Inc. evaluated each Joshua tree to determine which trees were suitable for relocation/transplanting based on a general health assessment. Each Joshua tree received a metal numbered tag which was affixed on the north side of each tree for orientation purposes during future transplanting. Surveyor flagging was also placed around those trees suitable for transplanting to facilitate future identification. The precise location of each tree was recorded using a Garmin GPS unit and a Bushnell Yardage Pro rangefinder was utilized to determine the extent of the property boundaries. Those Joshua trees which occur on the property site are presented in Table 4-1 and the locations are provided in Figure 2.

The factors utilized to determine which Joshua trees were suitable for transplanting include the following factors:

- 1. Trees from about 1 foot in height up to approximately 12 feet,
- 2. No visible signs of damage to the tree such as absence of bark due to rodent or Other animals,
- 3. Minimal number of branches (No more than 2 or 3 branches),
- 4. No excessive leaning of the tree,
- 5. No yellow or brown fronds,
- 6. Proximity to other Joshua trees (i.e., clonal), and
- 7. No exposed roots at the base of the tree,
- 8. Dying or Dead.

4.0 RESULTS

There are 4 Joshua trees on the property and the GPS locations of the Joshua trees are provided in Table 4-1. A total of 0 Joshua trees (0%) are suitable for relocation/transplanting based on the seven factors listed in Section 3.0 (Table 4-1). The Joshua trees suitable for transplanting should be relocated/transplanted on-site, which is the preferable option, or to an off-site area approved by the City of Victorville. Those Joshua trees that are not suitable for relocation/transplanting due to size, health of the tree, presence of damage, excessive branches, excessive leaning, clonal, and exposed roots should be disposed of as per City requirements.

Table 4-1: Joshua tree census. (Note: The GPS locations of the Joshua trees are provided below and those trees which are suitable for transplanting on-site as part of project landscaping are highlighted in red.)

Total Number of		Joshua Trees to be	Number of Clonal	Number of Non-	Number of Dead	
Joshua Trees On Site		Transplanted	Trees	Clonal Trees	Trees	
	4	0	1	3	0	

	Life						Health	Number of	
Tag#	Stage	Height	Location	Panicles	Branches	Condition	Assessment	Trunks	Transplantable
			N 34.478187°						
9883	Adult	13	W 117.338124°	1	6	Good			No
			N 34.478042°						
9884	Adult	13	W 117.337735°	13	16	Good			No
			N 34.479129°						
9885	Juvenile	3	W 117.335128°			Good	Leaning		No
			N 34.479043°						
9886	Juvenile	6	W 117.335955°			Good		2	No

(Note: The Tag numbers correspond to the numbers placed on the Joshua trees.)

5.0 CONCLUSIONS

A total of 4 Joshua trees are located on the property and 0 of these trees are suitable for relocation/transplanting. This conclusion was based on: (1) trees which were one foot or greater in height and less than twelve feet tall (approximate); (2) in good health; (3), two branches or less; (4) density of trees (i.e., no clonal trees); (5.) no exposed roots; and (6) trees that are not leaning over excessively. As indicated in Table 4-1, all of the Joshua trees which were not suitable for relocation are either to large, leaning or are multiclonal As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species for one year until a final decision is made in 2021. Therefore, any attempt to remove the Joshua tree from its current position will require an Incidental Take Permit (ITP).

The City of Victorville's Municipal Code (Chapter 13.33) requires preservation of Joshua trees given their importance in the desert community. A qualified City-approved biologist or arborist should be retained to conduct any future relocation/transplanting activities and should follow the protocol of the City's Municipal Code and Protected Native Vegetation Plan provided by the City's Planning Division. The following criteria will be utilized by the contractor when conducting any future transplanting activities.

- A. The Joshua trees will be retained in place or replanted somewhere on the site where they can remain in perpetuity or will be transplanted to an off-site area approved by the City where they can remain in perpetuity. Joshua trees which are deemed not suitable for transplanting will be cut-up and discarded as per City requirements.
- B. Earthen berms will be created around each tree by the biologist prior to excavation and the trees will be watered approximately one week before transplanting. Watering the trees prior to excavation will help make excavation easier, ensure the root ball will hold together, and minimize stress to the tree.

C. Each tree will be moved to a pre-selected location which has already been excavated and will be placed and oriented in the same direction as their original direction. The hole will be backfilled with native soil, and the transplanted tree will be immediately watered. As noted in Section 3.0, a numbered metal tag was placed on the north side of the trees and the trees were also flagged with surveyor's flagging. The biologist will develop a watering regimen to ensure the survival of the transplanted trees. The watering regimen will be based upon the needs of the trees and the local precipitation.

6.0 REFERENCES

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7.0 CERTIFICATION

I hereby certify the statements furnished above and in the attached exhibits, present the data and information required for this Joshua tree survey and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this survey was performed by Brian Bunyi and Ryan Hunter.

Date: December 17, 2021 Signed: Ryan Hunter

Brian Bunyi

Jessica Hensley

Field Work Performed by:

Ryan Hunter
Environmental Scientist/Biologist

Brian Bunyi
Environmental Scientist/Biologist

Jessica Hensley
Environmental Scientist/Biologist



